

# State of Utah

## DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF AIR QUALITY

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DAQE-600-96

June 10, 1996

Clifford P. Woodland  
Fife Rock Products  
PO Box 479  
Brigham City, Utah 84302

Dear Mr. Woodland:

Re: Approval Order for Replacement of Dry Cyclone and Wet Scrubber With Water Sprays  
Brigham City Aggregate Plant  
Box Elder County, CDS-A2

The attached document is an Approval Order for the above referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Tim Blanchard. He may be reached at (801) 536-4057.

Sincerely,

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Russell A. Roberts, Executive Secretary  
Utah Air Quality Board

RAR:JTB:dn

cc: Bear River District Health Department  
Mike Owens, EPA Region VIII

Image Not  
Available

# **STATE OF UTAH**

## **Department of Environmental Quality**

### **Division of Air Quality**

#### **APPROVAL ORDER FOR REPLACEMENT OF DRY CYCLONE AND WET SCRUBBER WITH WATER SPRAYS - BRIGHAM CITY AGGREGATE PIT**

**Prepared By: Tim Blanchard, Engineer**

#### **APPROVAL NUMBER**

**DAQE-600-96**

**Date: June 10, 1996**

#### **Source**

**Fife Rock Products**

**Russell A. Roberts  
Executive Secretary  
Utah Air Quality Board**

*Abstract*

*On May 1, 1992, Fife Rock Products removed the dry cyclone and wet scrubber from their sand and gravel plant at their Brigham City facility and replaced them with water sprays. The dry cyclone and wet scrubber controlled emissions from a jaw, a cone crushers and the "C" chip screen. After being inspected and being found to be non compliant with the Approval Order dated March 11, 1987, Fife Rock Products was issued a Notice of Violation (NOV). The Notice of Intent (NOI) is in response to an order given by the Utah Division of Air Quality to submit a NOI for the removal of the dry cyclone and wet scrubber and their replacement with water sprays. There is no increase in emissions due to the change.*

The project has been evaluated and found to be consistent with the requirements of the Utah Air Conservation Rules (UACR) and the Utah Air Conservation Act. A 30-day public comment period was held and all comments received were evaluated. The conditions of this Approval Order (AO) reflect any changes to the proposed conditions which resulted from the evaluation of the comments received. This air quality AO authorizes the project with the following conditions, and failure to comply with any of the conditions may constitute a violation of this order.

**General Conditions:**

1. This AO applies to the following company:

Fife Rock Products Co.  
P. O. Box 479  
Brigham City, Utah 84302  
(801) 723-3478  
(801) 399-2252

The equipment listed below in this AO shall be operated at the following location:

**PLANT LOCATION:**

620 East 500 South Brigham City

Universal Transverse Mercator (UTM) Coordinate System:  
4,595,200 meters Northing; 415,800 meters Easting

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the UACR, Utah Administrative Codes (UAC), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence unless specifically defined otherwise herein.
3. Fife Rock Products Co. shall install and operate the crushing and screening plant according to the information submitted in the Notice of Intent dated May 9, 1994, and additional information submitted to the Executive Secretary dated August 24, 1994, September 7, 1994, and March 6, 1996.

4. A copy of this AO shall be posted on site. The AO shall be available to the employees who operate the air emission producing equipment. These employees shall receive instruction as to their responsibilities in operating the equipment according to all of the relevant conditions listed below.
5. The approved installations shall consist of the following equipment:

Grandfathered Equipment

- A. Trap feeder - Shop built
- B. Cedarapids screen 4' X 12' DD (SN 32F2095)
- C. Auxiliary crusher - Cedarapids 12"X16" Jaw
- D. Auxiliary crusher - Cedarapids 24"X16" Roll
- E. Trap/Belt loader with screen

Equipment modified or manufactured after August 31, 1983, subject to 40 CFR 60 Subpart OOO.

- F. Secondary screen - El Jay 5'X16' TD (SN 34B0994)
- G. #1 Primary screen - El Jay 5'X16' TD (SN 34H0383)
- H. #2 Primary screen - El Jay 5'X14' TD (SN34B0787)
- I. Secondary cone crusher - El Jay 45" Standard (SN 22C 1679)
- J. Primary jaw crusher - Austin Western 15"X36" (SN211A)

Miscellaneous Equipment

- K. Associated equipment (conveyors, etc.)
- L. Various water sprays on aggregate stock piles at the processing plant
- M. Various mobile diesel equipment (front-end loader, dozer, etc.)
- N. 28" X 8' Trommel screen

6. This AO shall replace the AO dated: March 11, 1987

**Limitations and Tests Procedures**

7. Visible emissions from the following emission points shall not exceed the following values:
  - A. Crushers - 15% opacity (See Condition 5.I &J)
  - B. Screen - 10% opacity (See Condition 5.F, G & H)
  - C. All conveyor transfer points associated with the crushers and chip screen - 20% opacity (See Condition 5.F through J)
  - D. All diesel engines - 20% opacity
  - E. All other emission points - 40% opacity (See Condition 5.A, through E)
  - F. All fugitive sources - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. Visible emissions from mobile sources and intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply.

Visible emissions from haul road traffic shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply. Six points, distributed along the length of the haul road, shall be chosen by the Executive Secretary or his representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made one-half the vehicle length or greater behind the vehicle. The accumulated six readings shall be averaged for the compliance value.

8. The following production limits shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC:

**600,000 tons per 12-month period**

Compliance with the annual limitations shall be determined on a rolling 12-month total. The owner/operator shall calculate a new 12-month total based on the first day of each month using data from the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Records of production, including rolling 12-month totals shall be made available to the Executive Secretary or his representative upon request and shall include a period of two years ending with the date of the request. Production shall be determined by examination of sales records and truck weigh scales.

**Roads and Fugitives**

9. Fife Rock shall operate in accordance with the fugitive dust control plan dated February 14, 1996, as submitted to the Executive Secretary.
10. Water sprays or chemical dust suppression sprays shall be installed at the following points to control fugitive emissions:
  - A. All crushers
  - B. All screens
  - C. All conveyor transfer points
  - D. Secondary screens
  - E. Sand unloading
  - F. Storage pile stacking conveyors
  - G. Crusher return conveyor

The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary.

11. The moisture content of the material being processed screen shall be maintained at a minimum of 4.0% by weight. The moisture content shall be tested if directed by the Executive Secretary using the appropriate ASTM method.

### **Fuels**

12. The owner/operator shall use only #2 fuel oil as a primary fuel in the mobile equipment. If any other fuel is to be used, an AO shall be required in accordance with R307-1-3.1, UAC.
13. The sulfur content of any fuel consumed by on site equipment shall not exceed 0.5 percent by weight. Sulfur content shall be decided by ASTM Method D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the Executive Secretary.

### **Federal Limitations and Requirements**

14. In addition to the requirements of this AO, all provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subparts A and 000 (See Condition 5F through J) (See Appendix A).
15. For sources that are subject to NSPS visible emission observations that are performed during the initial compliance inspection shall consist of 30 observations of six minutes each in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9. It is the responsibility of the owner/operator of the source to supply these observations to the Executive Secretary. A certified observer must be used for these observations.

### **Records & Miscellaneous**

16. Prior to installing and operating this equipment at any site, the owner/operator shall obtain Approval for Temporary relocation in accordance with R307-1-3.1.9, UAC. Notices of Temporary Relocation shall include the following information (a form is available from the Division of Air Quality (DAQ)):
  - A. The location of the proposed site. (Please include directions on how to go to the site)
  - B. The expected startup and completion dates for operating at the proposed site.
  - C. A site diagram showing the general equipment location on site (to scale), and the distance to the nearest houses, barns or commercial operations (to scale if the concrete batch plant boundary is located within one mile of these buildings).
  - D. A list of the equipment to be operated at the proposed site.
  - E. Include a reference to this AO.

17. Before granting Approval for Temporary Relocation, the Executive Secretary shall evaluate the proposed site to verify that the plant will not cause a new violation of the National Ambient Air Quality Standards (NAAQS). This evaluation shall be based on the computer dispersion modeling conducted by the DAQ in the initial Notice of Intent and information submitted in the Notice of Temporary Relocation. If violations of the National Ambient Air Quality Standards (NAAQS) are suspected at the proposed site, the owner/operator shall be required to:
  - A. Apply air position controls at the proposed site which are more stringent than those outlined in the conditions of this AO and/or
  - B. Perform 30 operating days of continuous ambient monitoring for PM<sub>10</sub> to demonstrate that the applicable NAAQS are not violated at the proposed site under normal operating conditions. Monitoring shall be carried out in accordance with the Utah DAQ guidelines.

Relocations to exceed 180 days shall be preceded with a Notice of Intent and a valid AO according to R307-1-3.1.1, UAC.

18. All records referenced in this AO or in applicable NSPS or NESHAP, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or his representative upon request. Examples of records to be kept at this source shall include the following as applicable:
  - A. Production rate (Condition number 8)
  - B. Fugitive dust control plan (Condition number 9)
  - C. Upset, breakdown episodes (Condition number 21)
  - D. Emission Inventory (Condition number 20)
19. All installations and facilities authorized by this AO shall be adequately and properly maintained. All pollution control equipment shall be installed, maintained, and operated.
20. The owner/operator shall comply with R307-1-3.5, UAC. This rule addresses emission inventory reporting requirements.
21. The owner/operator shall comply with R307-1-4.7, UAC. This rule addresses unavoidable breakdown reporting requirements. The owner/operator shall calculate/estimate the excess emissions whenever a breakdown occurs. The total of excess emissions shall be reported to the Executive Secretary as directed for each calendar year.

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-1-3.1.1, UAC.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including the UACR.

Annual emissions for the entire facility are currently calculated at the following values:

<u>Pollutant</u>	<u>Tons/yr</u>
Particulate .....	51.81
PM <sub>10</sub> .....	29.01
SO <sub>2</sub> .....	0.82
NO <sub>x</sub> .....	8.94
CO .....	3.56
VOC .....	0.61

These calculations are for the purposes of determining the applicability of PSD and nonattainment area major source requirements of the UACR. They are not to be used for purposes of determining compliance.

In accordance with the requirements of Title V of the 1990 Clean Air Act, the following pollutants may be subject to an operating permit fee. Emissions from all sources, including pre-November 29, 1969 sources, may be subject to the operating permit fee. Both the fees rate and the class of pollutants are subject to change by State, the federal agencies, or both.

<u>Pollutant</u>	<u>Tons/yr</u>
Particulate .....	51.81
PM <sub>10</sub> .....	29.01
SO <sub>2</sub> .....	0.82
NO <sub>x</sub> .....	8.94
VOC .....	0.61

Approved By:

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Russell A. Roberts, Executive Secretary  
Utah Air Quality Board